

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

Harold Frank, Chairman
Forest County Potawatomi Community
P.O. Box 340
Crandon, Wisconsin 54520

Dear Chairman Frank:

Pursuant to the 2008 Class I redesignation for certain Forest County Potawatomi (FCP) parcels, U.S. Environmental Protection Agency is required to provide you notification of Prevention of Significant Deterioration (PSD) permitting actions that may impact the FCP. This letter serves as such notification of an upcoming PSD permit action by the Michigan Department of Environmental Quality (MDEQ) for Wisconsin Electric Power Company in Presque Isle, Michigan. The application is for the installation of air quality control equipment for the existing boilers at the coal fired electric generating power plant. The site is approximately 140 miles northeast of the FCP reservation.

We have enclosed a copy of the notice MDEQ has provided to us. It is our understanding that MDEQ has not yet drafted a permit for review and comment. As soon as EPA receives a copy of the draft permit, we will forward that to you. After you have had an opportunity to review the materials, if you have any concerns or comments on potential impacts to the Class I area, please feel free to provide them to EPA.

If you have any questions about the materials, or wish to further discuss any concerns you may have with this project, please feel free to contact me or Constantine Blathras, of my staff, at (312) 886-0671.

Sincerely,

A handwritten signature in cursive script that reads "Genevieve Damico".

Genevieve Damico
Chief
Air Permits Section

Enclosures



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



DAN WYANT
DIRECTOR

March 21, 2013

Ms. Susan Hedman, Regional Administrator
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Mail Code: R-19J
Chicago, Illinois 60604-3507

Dear Ms. Hedman:

Subject: Written Notice for a Proposed Modification at a Major Stationary Source

It is the understanding of the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), that you are serving as the Federal Land Manager (FLM) for the Forest County Potawatomi nonfederal Class I area located in Wisconsin. As such, this letter is to notify you in writing about a proposed major stationary source air Permit to Install (PTI) application submitted by Presque Isle Power Plant (PIPP). The application was submitted on behalf of Wisconsin Electric Power Company d/b/a as We Energies (We Energies) for the proposed installation of air quality control systems (AQCS) that are capable of reducing nitrogen oxides (NOx), sulfur dioxide (SO2) and hazardous air pollutants (HAPs) regulated under Title 40 of the Code of Federal Regulations (CFR), Part 63, Subpart UUUUU (EGU Mercury and Air Toxics Standards [MATS] Rule) from existing electric utility steam generating units (EUSGUs) Nos. 5, 6, 7, 8, and 9 at the PIPP located at 2701 North Lakeshore Boulevard, Marquette, Michigan. The proposed modification will also include a reconfiguration of existing fabric filter equipment. None of the proposed work for the AQCS will result in an increase in capacity for any EUSGU.

The following table provides relevant information about this proposed project that may be helpful for your review as required by the Prevention of Significant Deterioration (PSD) portion of the New Source Review (NSR) program.

Proposed Modification at a Major Stationary Source Project Information

Permit to Install No.	41-13
Submittal Date	March 8, 2013
Anticipated Installation Date	2014-2015, separate installations during scheduled maintenance shutdowns
Site Location	2701 North Lakeshore Boulevard, Marquette, Michigan
State Registration No.	B4261
Company Contact	Robert A. Greco, P.E., 414-221-5441
AQD Staff Assignment	<ul style="list-style-type: none"> David K. Riddle, Permit Engineer, 517-373-7077, Riddled@michigan.gov James G. Haywood, Modeler, 517-241-7428, HaywoodJ@michigan.gov Robert Sills, Toxicologist, 517-335-6973, SillsR@michigan.gov
Attainment Status	Currently Attainment for all Criteria Pollutants (Marquette County)

New Equipment	<p>The proposed AQCS equipment for NOx consists of individual boosted over fire air systems on each of the five EUSGUs--Boilers Nos. 5,6,7,8,and 9--and new Low NOx burners on EUSGUs 5 and 6. SO2 and HAP acid gas control will be accomplished via installation of three spray dryer absorbers (SDAs) on EUSGUs 5, 6, and 7, and Dry Sorbent Injection (DSI) systems on EUSGUs 8 and 9. Powder activated carbon (PAC) injection for mercury (Hg) control is currently installed and used on EUSGUs 7, 8, and 9 and will be added to EUSGUs 5 and 6. The existing fabric filters and booster fans currently associated with retired EUSGUs 1 through 4 will be reused for particulate and non-volatile metal removal following the EUSGUs 5 and 6 SDAs.</p> <p>The balance of new plant equipment required for the project includes one lime storage and slurry preparation facility, one DSI storage silo, one PAC storage silo, a new ash collection system for the existing EUSGUs 7 through 9 fabric filter, which will control EUSGUs 8 and 9, and new redundant auxiliary transformers to feed the AQCS equipment. The existing CEMS will be reconfigured and a mercury CEMS will also be added.</p>
Class I Areas	<p>Seney National Wildlife Refuge is located 96 km southeast of the site. The Forest County Potawatomi Class I area in Forest County, Wisconsin, is approximately 120 km southwest of the site. Isle Royale National Park Class I area and is approximately 170 km northwest of the site.</p> <p>Boundary Waters Canoe Area Wilderness in Minnesota is located greater than 250 kilometers from the site. Rainbow Lake Wilderness Area in Wisconsin is located greater than 240 kilometers from the site.</p>

Air Quality and Additional Impact Analysis	<p>The project is not a major modification for the regulated NSR pollutants PM, PM10, PM2.5, SO2, NOx, VOC, sulfuric acid (H2SO4), lead metal (Pb), and HF because the emissions of each of these pollutants will not increase by the pollutant-specific PSD "significant" thresholds using a past actual to projected actual emission analysis. At the request of AQD, a modeling analysis was done for short-term averaging times for PM10, PM2.5, SO2 and NOx. Predicted impacts are below applicable SILs for PM10, SO2 and below the PM2.5 SIL previously promulgated. Therefore, no further modeling has been conducted for these pollutants.</p> <p>For NOx, the predicted impact exceeds the 1-hour SIL. Therefore, NAAQS modeling for NOx has been performed at the request of the MDEQ. While PSD regulations require that facilities perform an increment and NAAQS analysis for all pollutants for which the impact from the proposed project exceeds the SIL because the proposed project is not subject to PSD for NOx, the PSD increment analysis is not required. In addition, there is currently not a PSD increment for short-term NOx impacts.</p> <p>The results of the NAAQS analysis demonstrate compliance with the NAAQS.</p> <p>The significant impact analysis is the first step in the PSD modeling. Emissions for CO are modeled to determine if the emissions increases will exceed the SILs defined in 40 CFR 52.21. If the impact for a pollutant exceeds the SIL, NAAQS modeling must be performed for the facility. If the impact for a pollutant meets the SIL, NAAQS modeling is not required.</p> <p>The past actual and future potential emission rates were used in the SIL analysis. Predicted impacts are below the SILs. Therefore, no further modeling is required.</p> <p>CO is the only pollutant subject to PSD review and therefore a Class I impact assessment would technically be required. However, no PSD Class I increments have been established for CO; therefore, no Class I modeling has been conducted.</p> <ul style="list-style-type: none">•Michigan's Air Toxics Analysis: Analysis was conducted and preliminary results appear acceptable.•Visibility: No visibility impairment is expected due to the emissions from the proposed project. <p>Projected actual emissions from the project indicate a reduction in some of the pollutants associated with visibility impairment (SO2, NOx, HF, and H2SO4). PM2.5 will increase, but by only 8.8 tpy, which is less than the PSD significance threshold of 10 tpy.</p> <p>CO, the only pollutant for which the project is major, does not contribute to visible emissions. It is anticipated that there will be a reduction in visibility impairing emissions based on actual emissions, primarily due to the large reductions in SO2 and NOx emissions.</p>
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Pollutant Information	Greenhouse gas, NOx, PM10, PM2.5, VOCs, SO2, F, Pb and H ₂ SO ₄ are not subject to PSD for the proposed project. For CO the proposed project will be a major modification.
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Emission Source	Control Technology	Pollutant	Potential Emissions
Boilers 5 (90MW) & 6 (90MW) capable of burning bituminous coal, sub-bituminous coal, and fuel oil	Individual boosted over fire air systems and new Low NOx burners on EUSGUs 5 and 6 SO2 and HAP acid gas control will be accomplished via installation of two spray dryer absorbers	CO	871.6 tpy each boiler
		NOx	1090.6 tpy each boiler
		SO2	348.7 tpy each boiler
	Powder activated carbon (PAC) injection for mercury (Hg) control will be added to EUSGUs 5 and 6.	PM (filterable)	131.0 tpy each boiler
		PM10	104.7 tpy each boiler
		PM2.5	104.7 tpy each boiler
	The existing fabric filters and booster fans currently associated with retired EUSGUs 1 through 4 will be reused for particulate and non-volatile metal removal following the EUSGUs 5 and 6 spray dryer absorbers	VOC	11.0 tpy each boiler
		Pb	7.9 E-02 tpy each boiler
		F	5.7 tpy each boiler
	Included in this emission unit are an electrostatic precipitator and fabric filter baghouse. The new baghouse was installed in 2005 in series with the ESP.	H ₂ SO ₄	5.7 tpy each boiler
		Greenhouse gas CO2e	904,369 tpy each boiler
Boiler 7 (90MW) capable of burning sub-bituminous coal and fuel oil	Individual boosted over fire air system SO2 and HAP acid gas control will be accomplished via installation of a spray dryer absorber	CO	884.8 tpy
		NOx	1,108.1 tpy
		SO2	49.1 tpy
		PM (filterable)	132.7 tpy
		PM10	106.0 tpy
	Mercury emissions from Boilers #7, #8, and #9 are controlled with a TOXECON TM mercury control demonstration system installed in 2005. Included in this emission unit are an electrostatic precipitator and the TOXECON TM fabric filter baghouse common to Boilers #7 through #9.	PM2.5	106.0 tpy
		VOC	0.88 tpy
		Pb	0.10 tpy
		F	7.0 tpy
		H ₂ SO ₄	7.4 tpy
		Greenhouse gas	953,307 tpy

Boilers 8 (90MW) & 9 (90MW) capable of burning sub-bituminous coal and fuel oil	Individual boosted over fire air systems on each boiler SO ₂ and HAP acid gas control will be accomplished via installation of Dry Sorbent Injection systems on EUSGUs 8 and 9. Mercury emissions from Boilers #7, #8, and #9 are controlled with a TOXECON™ mercury control demonstration system installed in 2005. Included in this emission unit are an electrostatic precipitator and the TOXECON™ fabric filter baghouse common to Boilers #7 through #9.	CO	884.8 tpy each boiler
		NO _x	1,108.1 tpy each boiler
		SO ₂	1,190.7 tpy each boiler
		PM (filterable)	132.7 tpy each boiler
		PM ₁₀	106.0 tpy each boiler
		PM _{2.5}	106.0 tpy each boiler
		VOC	14.5 tpy each boiler
		Pb	0.10 tpy each boiler
		F	14.5 tpy each boiler
		H ₂ SO ₄	14.9 tpy each boiler
		Greenhouse gas	217,650 tpy each boiler

Pollutant *	Net Emissions Increase or Decrease	Subject to PSD
PM (filterable)	increase 22.4 tpy	No
PM ₁₀	increase 8.36 tpy	No
PM _{2.5}	increase 8.30 tpy	No
NO _x	decrease 2,415 tpy	No
SO ₂	decrease 6,492.0 tpy	No
CO	estimated increase more than 450 tpy	Yes
Ozone (as VOC)	decrease 1.0 tpy	No
F	decrease 91.8 tpy	No
H ₂ SO ₄	decrease 1.6 tpy	No
Pb	decrease 0.004 tpy	No
Greenhouse Gas	increase 7,873 tpy	No

* Particulate Matter Less than and Equal to 10 microns diameter (PM₁₀); Particulate Matter Less than and Equal to 2.5 microns diameter (PM_{2.5}); Oxides of Nitrogen (NO_x); Sulfur Dioxide (SO₂); Carbon Monoxide (CO); Volatile Organic Compound (VOC); Fluoride (F); Sulfuric Acid Mist (H₂SO₄); Lead (Pb).

Via a separate letter, the AQD has notified the FLMs responsible for the federal Class I areas identified.

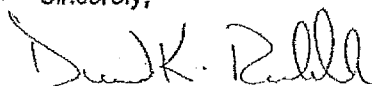
March 21, 2013

According to the 2008 Draft Federal Land Managers' Air Quality Related Values Workgroup Phase I Report, generally, the permitting authority should notify the FLM of all new or modified major facilities proposing to locate within 100 km of a Class I area. In addition, the permitting authority should notify the FLM of "very large sources" with the potential to affect Class I areas proposing to locate at distances greater than 100 km. The term "very large source" is not defined but is discussed in the referenced report as having a size over distance criteria that may be used to screen out projects from further review. As a part of the application package, PIPP has provided a Class I modeling analysis which demonstrates that the proposed project will not have an adverse impact on the air quality related values of Class I lands, including visibility. Projected actual emissions from the project indicate a reduction in some of the pollutants associated with visibility impairment (SO₂, NO_x, HF, and H₂SO₄). PM_{2.5} will increase, but by only 8.8 tpy, which is less than the PSD significance threshold of 10 tpy. CO, the only pollutant for which the project is major, does not contribute to visible emissions. It is anticipated that there will be a reduction in visibility impairing emissions based on actual emissions, primarily due to the large reductions in SO₂ and NO_x emissions.

Please note the AQD review of the proposed project has just begun. As such, we are unsure of when the public participation process will be held. Please contact me if you would like to be formally notified as to the start of the public participation process.

If you have any questions or if you need further information regarding this proposed modification to help you review a Class I area impact analysis, please feel free to call me.

Sincerely,



David K. Riddle
Air Quality Division
Permit Section
517-373-7081

cc: Ms. Genevieve Damico, U.S. Environmental Protection Agency, Region 5
Mr. Robert Greco, We Energies
Ms. Natalene Cummings, Forest County Potawatomi Community
Mr. Chris Hare, MDEQ